

In the Claims:

Claims 19-48

Please cancel these claims and insert the following new claims:

Claims 49

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--49. A method of treating a mixture of printed and contaminated waste paper in order to produce a pulp for use in the manufacture of paper and paperboards, said waste paper containing non-ink contaminants including stickies, which method comprises:

(a) forming a first aqueous fibrous suspension of said waste paper at a temperature below the melting point of the non-ink contaminants by applying specific mechanical energy sufficient to form a pumpable slurry and to release substantially all of the non-ink contaminants including the stickies, from the surface of the paper without dispersing such non-ink contaminants as finely divided particles throughout the fibrous suspension;

(b) removing substantially all of the non-ink contaminants including the stickies, which have been released without dispersal as finely divided particles from the first fibrous suspension by screening and cleaning to form a second aqueous fibrous suspension substantially free of the non-ink contaminants including the stickies;

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(c) after the step of removing the non-ink contaminants, (1) softening the ink vehicles and weakening their binding with the surface of the fibers, and then (2) detaching the ink particles from the surface of the fibers and dispersing the particles into the second fibrous suspension by submitting the second fibrous suspension at a consistency of more than 15% to the simultaneous actions of temperature, pressure, specific energy and chemical dosing sufficient to insure softening of the ink vehicles, detachment of the ink particles from the surface of the fibers and dispersion of the detached ink particles into the second fibrous suspension, whereby higher specific energy inputs and higher temperatures are used to detach the ink particles from the fibers of the second fibrous suspension after removal of the non-ink contaminants than are used on the first fibrous suspension before removal of the non-ink contaminants;

(d) limiting the total duration of step (c) (1) and (c) (2) to a range between 2 and 10 minutes and

(e) removing the detached ink particles from the second fibrous suspension to provide a brightness of at least 59 ISO in the final pulp.

Claim 50

50. The method of claim 49 wherein the specific mechanical energy applied in step (a) is lower than 50 KW.H/Ton.

Original claims 50, 51, 52

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Claim 51

51. The method of claim 49 wherein step (c)(1) is carried out at a temperature above the melting point of the non-ink contaminants.

Claim 52

52. The method of claim 49 wherein step (c)(2) is carried out at a temperature above the melting point of the non-ink contaminants. --

Respectfully submitted,

By Joseph S. Kentoff Jr.
Joseph S. Kentoff
Registration No. 33,189
Attorney for Applicant

McCormick, Paulding & Huber
Cityplace II
185 Asylum Street
Hartford, CT 06103-4102
(203) 549-5290